Ringing and migration at Ngulia, Tsavo, autumn 1990

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This, the 19th season of thorough coverage at Ngulia, resulted in the highest catch of birds in a year so far: 17 007 Palaearctic migrants and 252 Afrotropical birds were ringed. Recoveries and controls from the season's activities stand at five at the time of going to press (July 1992).

Ngulia Safari Lodge was manned on 26 nights during the two 'small moon' late autumn periods, from 14 to 28 November and from 11 to 23 December. Only six nights, three in each period, were clear. Otherwise, apart from 15 December when cloud failed

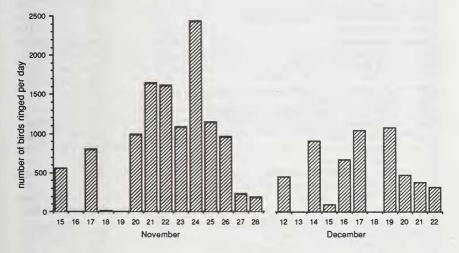


Figure 1. Showing the number of Palaearctic migrants ringed each day at Ngulia, autumn 1990

to descend, the remaining nights were all misty, and most produced large catches of migrants (Fig. 1). Weather conditions were particularly ideal during November when just a few light showers occurred on most nights. In December, however, showers were often heavy, and netting was more often curtailed. Falls were never really exceptional by Ngulia standards, though on eight November mornings and five in December, numbers grounded within a few hundred metres of the Lodge ran to several thousands.

Twenty-five people from four countries took part in operations, and the presence of many experienced ringers allowed us to set three 18-m mist-nets almost every night, and to run two ringing 'stations' at busy times. Moreover, nets in the bush could be opened promptly at dawn while processing of the night catch continued at full pace. The highest number of migrants ever ringed at Ngulia in a 24-h period was 2432 on 24 November, considerably higher than the previous best of 1868 set on 28 November 1989 (Backhurst & Pearson 1991). Catches in the bush accounted for some 25 per cent

Species	1990/91 total	%†	Total 1969- Dec 1990	
	total	701	Dec 1990	
Corncrake Crex crex	1	-	9	
Black and White Cuckoo Clamator jacobinus	41	408	223	
Asian Lesser Cuckoo Cuculus poliocephalus	2	_	4	
Scops Owl Otus scops	1		6	
Eurasian Nightjar Caprimulgus europaeus	67	459	330	
Eurasian Roller Coracias garrulus	13	459	66	
Eurasian Swallow Hirundo rustica	29	358	175	
Golden Oriole Oriolus oriolus	1	106	19	
Rufous Bush Chat Cercotrichas galactotes	38	78	926	
Irania Irania gutturalis	412	438	2116	
Sprosser Luscinia luscinia	4399	395	24534	
Nightingale L. megarhynchos	95	284	698	
Rock Thrush Monticola saxatilis	33	396	183	
Isabelline Wheatear Oenanthe isabellina	19	380	109	
Northern Wheatear O. oenanthe	24	335	153	
Pied Wheatear O. pleschanka	11	374	64	
Great Reed Warbler Acrocephalus arundinaceus	10	486	47	
Basra Reed Warbler A. griseldis	62	141	855	
Marsh Warbler A. palustris	5627	288	40966	
Sedge Warbler A. schoenobaenus	11	230	97	
Reed Warbler A. scirpaceus	8	203	80	
Upcher's Warbler Hippolais languida	43	234	377	
Olive-tree Warbler H. olivetorum	60	327	393	
Olivaceous Warbler H. pallida	60	226	469	
River Warbler Locustella fluviatilis	483	269	3735	
Wood Warbler Phylloscopus sibilatrix	3	_	7	
Willow Warbler P. trochilus	237	263	1863	
Blackcap Sylvia atricapilla	4	120	64	
Garden Warbler S. borin	84	255	681	
Whitethroat S. communis	4612	296	32804	
Barred Warbler S. nisoria	63	181	696	
Spotted Flycatcher Muscicapa striata	206	502	946	
Tree Pipit Anthus trivialis	2	133	29	
Red-backed Shrike Lanius collurio	114	228	1016	
Red-tailed Shrike L. isabellinus	131	312	894	
Hybrid L. collurio x L. isabellinus	1		12	
Number of species	35		32	
Total ringed	17007		115423	

Table 1. Numbers of Palaearctic night migrants ringed at Ngulia Safari Lodge from December 1969 to December 1990 (between October and February each season)

†The autumn 1990 total expressed as a percentage of the mean of the 18 years 1972–1973 to 1989–1990 for each species.

Footnote overleaf

Footnote to Table 1

Totals of Palaearctic species ringed in previous autumn seasons but not in autumn 1990 are as follows:

Little Bittern Ixobrychus m. minutus 4, Night Heron Nycticorax nycticorax 1, Eleonora's Falcon Falco eleonorae 1, Spotted Crake Porzana porzana 1, Great Snipe Gallinago media 1, Eurasian Cuckoo Cuculus canorus 2, Sand Martin Riparia riparia 6, Redstart Phoenicurus phoenicurus 3, Whinchat Saxicola rubetra 3, Savi's Warbler Locustella luscinioides 2, Chiffchaff Phylloscopus collybita 1, Red-throated Pipit Anthus cervinus 1, Yellow Wagtail Motacilla flava 3.

From December 1969 a total of 115 676 Palaearctic night-migrating birds of 48 species (plus one hybrid) has been ringed at Ngulia during southward passage between October and February inclusive.

of the birds ringed in November and almost 35 per cent in December. One hundred and eighty metres of mist-net were normally used in twelve sites. The highest bush catch, 574, was made on 17 December, after a night with very heavy showers which persisted until after dawn.

The Marsh Warbler¹ regained its usual position as the most-ringed species (cf. 1989– 90), followed by Whitethroat and Sprosser, and with River Warbler (483 ringed), as usual, in fourth position. In view of the high overall total ringed, it was not surprising that the numbers of all minor species (apart from the Rufous Bush Chat) were well above average (Table 1).

Marsh War	bler Acro	cephalus pal	ustris		
Radolfzell BX27952	1 v	20.06.89 16.12.90	Schmellnricht, Germany, 49°08N, 11°20E Ngulia, 3°00S, 38°13E. Elapsed time 213 d, great circle distance 6305 km		
Bruxelles 3-651199	3 v	30.07.90 26.11.90	Floriffoux, Belgium , 50°27N, 4°46E Ngulia, 119 d, 6720 km		
Stockholm AZ66200	3 v v	26.08.90 01.09.90 25.11.90	Sotemosse, Skåne, Sweden, 55°26N, 13°25E Sotemosse Ngulia, 91 d and 85 d, 6865 km		
Stockholm BA56927	3 X (cat)	26.11.90 c.15.05.91	Ngulia Ras Tanura, Saudi Arabia , 26°41N, 50°11E, c. 170 d, 3525 km.		
Whitethroa	t Sylvia co	mmunis			
Stockholm BA53268	3 X (car)	22.11.90 23.06.91	Ngulia Neftegorsk district, near Kuybyshev, Russia , 52°40N, 51°13E., 213 d, 6305 km.		

 Table 2. Recoveries and controls reported by July 1992 from the

 1990 autumn Ngulia ringing

¹Scientific names are given in Tables 1 and 3

Recoveries and controls from the season's work reported so far are given in Table 2. There were also two retraps of Palaearctic birds ringed at Ngulia in previous seasons: an Olivaceous Warbler ringed on 26 November 1989 and retrapped on 20 November 1990, and a Garden Warbler ringed on 5 January 1990, retrapped 16 December 1990.

Stockholm Museum rings were used this season on all Palaearctics ringed at Ngulia. The purpose of this experiment was to see if recovery rates increased compared with those obtained using our normal 'Inform Museum Nairobi' rings. We have found that some recoveries, with the *ring* number written on the envelope, are mis-sorted to the post office box number of the ring number. We know that this has happened at least twice because the 'ring number box renter' has forwarded the recovery. What we do *not* know is how many recoveries have been misdirected in this way. The use of Stockholm-addressed rings is an attempt to test whether we have been losing a significant number of recoveries. However, there are other factors controlling whether recoveries are a) ever reported in the first place and b) if they are, whether they reach the relevant ringing authority. For instance, a killer of small birds in the Middle East may be more inclined to report a ring from an exotic place such as Nairobi than from a European address to which he or his friends have written many times.

Afrotropical species

Very few Afrotropical birds are associated with the massive southerly movement of Palaearctic species at Ngulia. The most numerous are the Harlequin Quail and various nightjars. Other species, including known Afrotropical migrants, have occurred over the years only in minute numbers, suggesting that their main migrations are at different times of year, that they take place mainly away from Ngulia or that they occur by day. It is also conceivable, though unlikely, that some Afrotropical species pass over Ngulia at night during the autumn but are not attracted down to an appreciable extent.

The immature Ashy Flycatcher caught during morning netting in the bush on 24 November was the first record for the area and the two Pygmy Kingfishers (nominate race), also caught in the bush on 23 and 24 November were new too. The Red-capped Robin Chat caught at night on 15 November was only the second record (the previous example had also been caught at night) and the Singing Bush Lark, caught at night on 20 November was the first example since 1983. The usual owl seen at Ngulia is Verreaux's Eagle Owl *Bubo lacteus*, but it has never been ringed; Barn Owls are seldom seen but one was caught twice (and ringed) on 22 December this year. A list of Afrotropical birds caught during this season is given in Table 3.

Species/totals:	1990/91	1969–91
Dwarf Bittern Ixobrychus sturmii	1	3
Harlequin Quail Coturnix delegorguei	51	1131
Namagua Dove Oena capensis	1	12
Laughing Dove Streptopelia senegalensis	10	69
Didric Cuckoo Chrysococcyx caprius	1	159
White-browed Coucal Centropus superciliosus	1	6
Barn Owl Tyto alba	1	1

Table 3. Afrotropical species ringed at Ngulia during the 1990 autumn. At least some examples of birds printed in **bold type** have been caught at night

Species/totals:	1990/91	1969-91
Slender-tailed Nightjar Caprimulgus clarus	4	58
Donaldson-Smith's Nightjar C. donaldsoni	9	159
Dusky Nightjar C. fraenatus	10	50
Plain Nightjar C. inornatus	31	162
Grey-headed Kingfisher Halcyon leucocephala	7	26
Pygmy Kingfisher Ispidina p. picta	2	2
Red-fronted Tinkerbird Pogoniulus pusillus	1	2
Red and Yellow Barbet Trachyphonus erythrocephalus	1	18
Black-throated Honeyguide Indicator indicator	2	6
Lesser Honeyguide I. minor	3	21
Cardinal Woodpecker Denropicos fuscescens	1	3
Singing Bush Lark Mirafra cantillans	1	9
Rufous Chatterer Turdoides rubiginosus	1	20
Black Cuckoo Shrike Campephaga flava	4	15
Zanzibar Sombre Greenbul Andropadus importunus	3	12
Common Bulbul Pycnonotus barbatus	19	57
White-browed Scrub Robin Cercotrichas leucophrys	1	24
Red-capped Robin Chat Cossypha natalensis	1	2
Grey-backed Camaroptera Camaroptera brachyura	6	37
Grey Wren Warbler C. simplex	1	27
Rattling Cisticola Cisticola chiniana	1	36
Winding Cisticola C. galactotes	1	3
Tawny-flanked Prinia Prinia subflava	1	14
Ashy Flycatcher Muscicapa caerulescens	1	1
Gambaga Flycatcher M. gambagae	1	4
Paradise Flycatcher Terpsiphone viridis	2	13
Black-backed Puffback Dryoscopus cubla	2	9
Slate-coloured Boubou Laniarius funebris	3	15
Grey-headed Bush Shrike Malaconotus blanchoti	2	3
Three-streaked Bush Shrike Tchagra jamesi	2	15
Black-headed Tchagra T. senegala	2	15
Wattled Starling Creatophora cinerea	3	26
Superb Starling Spreo superbus	1	4
Collared Sunbird Anthreptes collaris	3	7
Amethyst Sunbird Nectarinia amethystina	1	19
Variable Sunbird N. venusta	3	14
Abyssinian White-eye Zosterops abyssinica	11	34
White-winged Widowbird Euplectes albonotatus	2	12
Masked Weaver Ploceus intermedius	1	16
Chestnut Weaver P. rubiginosus	3	72
Red-billed Quelea Quelea quelea	1	34
Crimson-rumped Waxbill Estrilda rhodopyga	1	10
Jameson's Firefinch Lagonosticta rhodopareia	5	34
Green-winged Pytilia Pytilia melba	8	90
Red-cheeked Cordon-bleu Uraeginthus bengalus	8	59
Purple Grenadier U. ianthinogaster	6	7
Somali Golden-breasted Bunting Emberiza poliopleura	2	23
Yellow-rumped Seed-eater Serinus atrogularis	1	6
Total	252	2686

In addition, 517 individuals of a further 80 Afrotropical species have been ringed in previous autumn seasons at Ngulia, making a total, when added to those listed above of 3203 individuals of 137 species.

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References

BACKHURST, G.C. & PEARSON, D.J. 1977. Ethiopian region birds attracted to the lights of Ngulia Safari Lodge, Kenya. Scopus 1: 98-103.

BACKHURST, G.C. & PEARSON, D.J. 1991. Ringing and migration at Ngulia, Tsavo, 1989–90 autumn. Scopus 13: 181–183.

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